

## CLAIMS

What is claimed is:

1. A method for casting an elongated pole member comprising:
  - providing an elongated casting mold having a lengthwise rim boundary defining a planar open mouth from which a cast pole member can be slidably removed;
  - positioning the elongated casting mold in a horizontal molding orientation;
  - pouring casting material into the casting mold; and
  - rotating the mold to a demolding horizontal orientation in which the open rim boundary of the mold is facing downward.
2. The method of claim 1, wherein said rotating the mold comprises rotating the mold approximately 180° about its lengthwise axis.
3. The method of claim 1, wherein the casting material comprises low water content concrete mix.
4. The method of claim 1, wherein said rotating the mold to a demolding orientation is performed prior to the casting material curing.
5. The method of claim 1, wherein said rotating the mold to a demolding orientation is preceded by capping the open rim boundary with a support rack member.
6. The method of claim 1, wherein said rotating the mold to a demolding orientation is followed by positioning the mold relative to a receiving platform such that the casting material is supported at the open rim boundary of the mold by the receiving platform.
7. The method of claim 6, said positioning comprising raising the receiving platform such that the casting material is supported at the open rim boundary of the mold by the receiving platform.

1 8. The method of claim 6, wherein the mold is fixedly attached to a mold support  
2 member.

1 9. The method of claim 8, wherein said mold support member is a pivoting armature.

1 10. The method of claim 8, wherein said positioning the mold is followed by lowering  
2 the receiving platform such that the casting material is gravity-drawn from the mold onto  
3 the upper surface of the receiving platform while the mold support member is maintained  
4 substantially stationary.

1 11. The method of claim 8, wherein said positioning comprising lowering said mold  
2 support member such that the casting material is supported at the open rim boundary of  
3 the receiving platform.  
4

4

1 12. A concrete pole casting apparatus comprising:

2 a mold support armature rotatably cycled between a molding position and a  
3 demolding position;

4 an elongated casting mold fixedly attached in a horizontal disposition to the mold  
5 support armature, wherein the elongated casting mold has a longitudinally disposed  
6 single plane open rim boundary facing upward when the mold support armature is in the  
7 molding position and facing downward when the mold support armature is in the  
8 demolding position; and

9 a receiving platform disposed in substantial vertical alignment with the mold  
10 support armature in the demolding position, said receiving platform vertically adjustable  
11 such that said receiving platform may be lowered such that the concrete cast within the  
12 casting mold is gravity-drawn from the mold onto the receiving platform.

1 13. The concrete pole casting apparatus of claim 12, further comprising a support rack  
2 affixed to the open rim boundary prior to the mold support armature being rotated to the  
3 demolding position.

1 14. The concrete pole casting apparatus of claim 12, wherein said mold support armature  
2 comprises a lever-like member having a first surface onto which said casting mold is  
3 attached.

1 15. The concrete pole casting apparatus of claim 12, further comprising  
2 electromechanical control means for cycling said mold support armature between the  
3 molding position and the demolding position.

1 16. The concrete pole casting apparatus of claim 15, wherein said electromechanical  
2 control means for cycling said mold support armature between the molding position and  
3 the demolding position includes motor means for rotating the mold support armature by  
4 approximately 180° between cycles.

1 17. The concrete pole casting apparatus of claim 12, wherein said casting mold  
2 comprises a substantially rigid mold liner contoured to produce a U-shaped cast member.

1 18. The concrete pole casting apparatus of claim 17, wherein said mold liner has a cross-  
2 section profile characterized as including a pair of side lobes separated by a recessed  
3 region.

1 19. The concrete pole casting apparatus of claim 17, wherein the casting mold has  
2 opposing inner lateral sides that taper inwardly from one end of the mold to the other.  
3  
5